

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

September 27, 2010

Colonel Steven J. Roemhildt
District Engineer
Mobile District Corps of Engineers
Attn: Casey Ehorn
Birmingham Field Office
218 Summit Parkway, Suite 222
Homewood, Alabama 35209

Subject: Public Notice SAM-2010-01125-CHE; USS Real Estate, Fleming Farms

Dear Colonel Roemhildt:

The U.S. Environmental Protection Agency (EPA), Region 4, has reviewed Public Notice (PN) SAM-2010-01125-CHE, dated September 3, 2010. The applicant, USS Real Estate, is requesting authorization to deposit fill material associated with development of the Fleming Farms subdivision in Jefferson and Shelby Counties, Alabama, including development of residential lots and impoundment of a tributary to the Cahaba River for creation of an amenity pond. The proposed activities would directly impact 0.6 acres of wetlands, 0.96 acres of open water, and 6,149 linear feet of streams in the Cahaba River watershed (HUC 03150202). This letter summarizes EPA's position on this project, concentrating specifically on the Section 404 (b)(1) Guidelines (Guidelines) and the implementing regulations at 40 CFR Part 230. The purpose of the Guidelines is to restore and maintain the chemical, physical, and biological integrity of waters of the United States. These goals are achieved, in part, by prohibiting discharges of dredged or fill material that would result in avoidable or significant adverse impacts on the aquatic environment. The burden to demonstrate compliance with the Guidelines rests with the permit applicant.

The streams on the project site are tributaries to the Cahaba River, which runs along the southeast margin of the project site. The Cahaba River is Alabama's longest remaining stretch of free-flowing water, and is the primary drinking water source for one-fifth of the State's population. American Rivers reported the Cahaba as one of the 10 most endangered rivers in North America. The Nature Conservancy ranks the Cahaba Watershed as the 29<sup>th</sup> most critical for protecting biodiversity out of 2,000 total watersheds in the United States. With 131 different fish species, no other river in North America has more species of fish per mile than the Cahaba River, 18 of which are found nowhere outside the Mobile River Basin. The Cahaba River is an Outstanding Alabama Water. EPA considers the Cahaba River and its tributaries to be Aquatic Resources of National Importance (ARNIs).

The regulations at 40 CFR § 230.10(a) stipulate that no discharge of dredge and/or fill material into waters of the United States shall be permitted if there is a less environmentally damaging practicable alternative to the proposed project, provided the alternative does not have other significant adverse environmental consequences. Moreover, when activities associated with proposed impacts to special aquatic sites are not water-dependent, practicable alternatives that do not involve special aquatic sites are presumed to be available. Residential development is intermet Address (URL) • http://www.epa.gov

not an inherently water-dependent activity. Most, if not all, of the proposed direct impacts are readily avoided by not developing lots with streams or wetlands and/or reconfiguring site design to incorporate (undeveloped) streams and their buffers. It is unclear from the PN whether streams would be piped or simply filled in, but EPA strongly opposes impacts to waters of the United States, a public resource, for gaining of "fast lands" for convenience in private development.

It does not appear that an alternatives analysis has been conducted as called for in 40 CFR § 230.10(a), but many alternatives to an amenity pond are readily available that would not involve impacts to aquatic resources. The applicant should consider other alternatives that provide "value added" amenities to the subdivision such as swim/tennis activities and preservation of green space along stream corridors. As described in the proposal (per the PN), the Cahaba River is a valued ecological resource important to the state of Alabama, and provides habitat for many threatened and endangered species. Taking advantage of the proximity of this resource by creating walking/hiking trails, wildlife/nature viewing areas, and parks (for example) could provide a valuable amenity beneficial to residents as an alternative to impacting the ecosystem to create an amenity pond.

Other lakes and resources for water-related recreation exist in the area, and should be considered as part of an alternatives analysis. A June 8, 1993, U.S. Army Corps of Engineers (Corps), Memorandum for Commander with the subject line "Clarification of Headquarters Guidance- Permitting of Recreational/Aesthetic Impoundments" established a "bottom line" test authorizing recreation and/or aesthetic impoundments: "impoundments that are proposed only for recreational and/or aesthetic purposes generally should not be permitted when they are proposed in important wetlands and other aquatic resources." The Wilmington Corps District has also developed useful guidelines regarding these types of ponds.

Aside from direct impacts from filling of aquatic resources, secondary and cumulative impacts of the proposed development and change in land use need to be taken into consideration, as well. The secondary effects of residential development can include runoff carrying lawn-related pesticides and petroleum byproducts, increased impervious surface cover from the development and infrastructure required to serve a new subdivision, increased erosion and sedimentation from greater stormwater velocities, eutrophication, changes in temperature associated with increases in impervious surfaces and removal of shading vegetation, and resultant changes in dissolved oxygen. To avoid and minimize these effects, low-impact development practices should be utilized to prevent such problems, and vegetated buffers established to protect both streams and wetlands.

The potential for eutrophication and increased erosion are of particular concern because of existing impairments on the Cahaba River. The subject segment of the Cahaba has both a Section 303(d) listing for sedimentation and an approved Total Maximum Daily Load for nutrients. According to 40 CFR §230.10(b), no discharge may be authorized if it causes or contributes to violations of any applicable State water quality standard or violates any applicable toxic effluent standard; 40 CFR §230.10(c) further prohibits discharges that would cause or contribute to significant degradation of the waters of the United States. The nature of the proposed activities and the siting along the Cahaba make it very likely that this project would aggravate the existing impairments. By expanding the reach of infrastructure (e.g., roads,

utilities) into an undeveloped area, this project may facilitate additional development in the watershed, adding to the overall cumulative effects.

40 CFR §230.10(d) of the Guidelines prohibits issuance of a permit to fill aquatic resources "unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem." Specifically, no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem. As described above, given that the proposed activities are not water-dependent, the majority, if not all, of the proposed impacts should be avoided. The impacts of any unavoidable fill should then be minimized as much as possible before compensatory mitigation is considered. Once information is provided as to how project alternatives, then avoidance, then minimization components comply with the Guidelines, we welcome the opportunity to further discuss appropriate compensatory mitigation for this project.

Based on the above observations, EPA has determined that the project, as currently proposed, does not comply with the Section 404(b)(1) Guidelines and may have substantial and unacceptable adverse impacts on an ARNI. Therefore, we recommend denial of the project, as currently proposed. This letter follows the field-level procedures outlined in the August 1992 Memorandum of Agreement between the EPA and the Department of the Army, Part IV, paragraph 3(a) regarding Section 404(q) of the Clean Water Act.

Thank you for the opportunity to comment on this PN. If you have any questions regarding these comments, please contact Rosemary Hall (Hall.Rosemary@epa.gov or 404-562-9846) or Jennifer Derby (Derby.Jennifer@epa.gov or 404-562-9401).

Sincerely,

Yames D. Giattina

Directo

Water Protection Division

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